BUREAU OF HIGHWAYS
REQUEST FOR PROPOSAL
for
QUALIFICATIONS BASED SELECTION FOR NON-PREQUALIFIED SERVICES

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Technical Proposal. The Technical Proposal must be submitted in accordance with the latest "Vendor Selection Guidelines for Service Contracts", available on the MDOT website.

For efficiency sake, we are asking that the vendor firm provide 5 (one inbound) paper copies of the Proposal to the MDOT project manager named in the attached scope of services.

These copies must be received by 4:00 PM Friday, May 13, 2005**.** Fax and electronic copies are not acceptable.

The address is;

Michigan Department of Transportation
Secondary Complex
8885 Ricks Rd.
P.O. Box 30049
Lansing, Michigan 48909
Attn: Richard M. Smith, P.E.

In addition, provide one unbound copy to:

Regular Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

OR

Overnight Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
425 W. Ottawa
Lansing, MI 48933

This copy is to be received within three working days after the due date and time specified above. Please do not deliver in person.

Any questions relative to the scope of services must be submitted by e-mail to the MDOT project manager. Any questions must be asked at least three working days prior to the due date and time

specified above. All questions and their answers will be placed on the MDOT website as soon as possible after receipt of the questions. The names of vendors submitting questions will not be disclosed.

This contract will be a cost plus fixed fee not to exceed contract, therefore the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

If selected, the vendor should make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed.

This selection requires that all firms must submit a technical proposal as described in the scope of services and Vendor Selection Guidelines. All firms that submit will be given an opportunity for a presentation (there will not be a shortlisting). The selection team will review the information submitted along with the presentations and will select the firm considered most qualified to perform the engineering services based on the technical proposals and presentations. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

There are no limit to the number of pages allowed for the Technical Proposals. The presentations will be limited to two hours.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

The scope of services is attached to this solicitation.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY

PROJECT SCOPE OF SERVICES
FOR
ENGINEERING INSPECTION OF THE ZILWAUKEE BRIDGE

CONSTRUCTION & TECHNOLOGY DIVISION April 4, 2005

I. LOCATION:

Zilwaukee Bridge, B03 - 73112 (Northbound, Southbound, and the "H" Ramp) I-75/US-23 over the Saginaw River, Zilwaukee Michigan.

A map is attached showing the general location of the bridge.

II. PURPOSE

The purpose of this project is to perform an engineering inspection of the Zilwaukee bridge using the latest in technology and engineering expertise. The information obtained from the inspection will be compared to previous inspections and used to insure the long term performance of this very large and costly structure.

The Zilwaukee Bridge is a long (over 8000 ft., reference line to reference line), and is a multispan, post-tensioned, concrete segmental box girder structure. Additional special features include modular expansion joints and pot bearings. The complex structural design characteristics of this bridge are not common and require advanced and, specific knowledge of, the engineering of this type of structural system and the associated deterioration mechanisms.

The deliverable for this project will be the "Bridge Inspection Report" (Report). This Report will have several components as noted below and will be attested to be accurate and complete under seal of a Registered Professional Engineer (Michigan).

MDOT, Construction and Technology Division will assign a Project Manager (MDOT PM) who will be responsible to administer the project for the Department.

III. CONSULTANT REQUIREMENTS

The Michigan Department of Transportation (MDOT) will hire a Consulting Engineering Firm (CONSULTANT) with the best experience in performing engineering inspections of bridges with the structural system noted above. The qualified candidate will have demonstrated knowledge of the design and structural analysis of this structural system, as well as a background in the repair and maintenance of the various components.

CONSULTANT firms will document in their Technical Proposal specific projects that demonstrate their experience with this type of structure.

The consultant firm must meet Article 20 requiring that 2/3rds of the principals must be licensed engineers in the state of Michigan.

IV. CONSULTANT SELECTION PROCESS

The consultant selection process is published in a guidance document "Vendor Selection Guidelines for Service Contracts, for MDOT", revised January 20, 2005, on the Operations Contract Support website (http://www.michigan.gov/mdot/0,1607,7-151-9625_32842---,00.html). All firms must submit **one** document that contains all of the required for both the proposal and the technical proposal (henceforth called the technical proposal). All firms that submit will be given an opportunity for a presentation (there will not be a shortlisting). Presentations are anticipated the week of May 23, 2005 or earlier if possible.

The selection team will review the technical proposal along with the presentations and will select the firm considered most qualified to perform the engineering services based on the technical proposals and presentations. The selection team will use **Exhibit E** for the selection criteria.

After approval, the selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. This will be required to be provided within 5 working days of notification. Negotiations will be conducted with the firm selected. and all responsive applicants will be interviewed. . The apparent best qualified consultant will be requested to develop a priced proposal and will have 5 working days to do this.

Each firm must provide four copies of their technical proposal and all documents must be received by the MDOT Project Manager by the close of business Friday, **May 13, 2005**. The address is;

Michigan Department of Transportation
Secondary Complex
8885 Ricks Rd.
P.O. Box 30049
Lansing, Michigan 48909
Attn: Richard M. Smith, P.E.

And one unbound copy to Operations Contract Support, see attached:

Any questions about the project must be directed to the MDOT Project Manager (smithri@michigan.gov) in email form. Answers, along with the questions, will be posted at the website and it is the consultant's responsibility to periodically check the website for issues that may affect their proposal. No questions will be answered less than or equal to three days prior to the proposal due date. Each firm must identify a project primary contact person. All questions must originate from this person and the email must contain a statement that it is the primary contact asking the question.

Emails that do not contain this statement or that are from others in the firm will be ignored.

V. DURATION & SCHEDULE

Authorization for this project is expected mid-August 2005. All field work must be completed by fall 2005, and the final Report will be due early 2006. Specific dates and milestones for the project will be developed by the CONSULTANT and will form a part of the contract. The CONSULTANT will develop a detailed schedule as described below and include it as part of their technical proposal. Failure to progress in alignment with the Work Plan and Schedule will be considered as failing to meet the terms of this contract and may result in the cancellation of the contract.

A. WORK PLAN

The CONSULTANT must develop a work plan which will detail the process of inspecting the bridge and preparing the Report, etc. The work plan must explain the operation of the inspection survey team and traffic control procedures while in the field at the site. It must explain the process for developing the Report and the staff that will be assigned to each of the tasks.

The Work Plan must be submitted as part of the Technical Proposal.

B. SCHEDULE OF DATES AND MILESTONES

The CONSULTANT is required to develop a Project Schedule for this work. The Project Schedule must be submitted in the form of a Gantt Chart showing meeting dates, draft Report submissions, etc. as milestones.

The Project Schedule must be submitted as part of the Technical Proposal.

Once the project begins, the CONSULTANT will be required to adhere to the schedule and any changes to the schedule must be submitted to the MDOT PM for approval prior to the change.

The CONSULTANT must be prepared to begin the field evaluation work within two weeks after receiving notice to proceed.

C. MEETING DATES

The CONSULTANT is required to attend several meetings during the project. The expected time frame for these meetings are shown below, however, these may be adjusted as mutually agreed to by the MDOT PM and the CONSULTANT.

1. Project Initiation Meeting. — One week after NTP (Notice to Proceed) (execution of authorization) and before beginning any field work. Location to be determined.

2.	Pre-Inspection Meeting	Prior to beginning the inspection Phase. Meeting location will be at the bridge site.
3.	Progress Meetings	Every week while at the site. And once every two weeks during the report preparation phase.
4.	Report Presentation	Near the completion of the contract. Meeting location will be in Lansing.

Progress meetings will typically be held at the bridge site at MDOT facilities during the Inspection Phase. Progress meetings will be held in Lansing at the Construction and Technology Division (C & T) offices, or at a mutually agreed to location, during the Analysis & Report Preparation Phases. During the Analysis & Report Preparation Phases the CONSULTANT will provide a copy of that portion of the Report that has been completed between meetings. This will form the basis for payment during these phases. The Consultant will also provide a report of the hours expended during the given period and a comparison of these hours to the budget.

The CONSULTANT's Project Manager will be responsible for developing an agenda at least 2 working days prior to the meeting and distributing the agenda to all attendees. The CONSULTANT's Project Manager will facilitate the meeting and will keep minutes of the meeting and publish them to all attendees within three working days after the meeting.

VI. STAFF QUALIFICATION REQUIREMENTS

The CONSULTANT will propose a team of engineers and technicians meeting the qualifications listed below. The number and level of staff will vary depending on the task and phase in the project. The CONSULTANT will ensure that the resources assigned to the project are appropriate to complete the task in the allotted time and are used in an efficient manner. All staff assignments will be made based on the level of education and experience.

The following qualifications are the minimum necessary for the required personnel and this must be documented with resumes and submitted with the technical proposal. An organizational chart showing names and responsibilities must be included in the technical proposal.

A. PROJECT MANAGER AND ENGINEERING EVALUATION TEAM LEADERS:

The CONSULTANT will provide a Project Manager who will be responsible for all aspects of the project. He / She will coordinate the daily activities of all project members and will sign and seal the Report. The Project Manager, or designate will be on site continuously during the Inspection Phase and will present at all

meetings. The following are the minimum qualifications for this position:

1. Professional registration as an engineer or structural engineer, licensed to practice in the State of Michigan.

2. Minimum of ten years of documented experience in long span concrete segmental bridge design, construction and maintenance inspections, and the evaluation of this type of bridge for rehabilitation.

3. He/she must have thorough understanding of the long term durability and maintenance aspects of this type of structure, be capable of identifying areas of structural or maintenance concerns, and making specific recommendations to address these concerns.

4. Documented skills in technical writing.

The Project Manager will be the primary contact with MDOT's Project Manager, and will make the initial assessment on site of all inspection findings. He/she will report immediately any unusual findings to the MDOT Project Manager or his designate.

Only one manager level position will be allowed and paid for on this project.

B. INSPECTION & ENGINEERING TEAM LEADERS

The CONSULTANT will provide engineers to lead inspection teams of staff engineers and technicians in the various inspection tasks in the field. They will have specialized expertise in a specific field of engineering such as materials (concrete, post-tensioning, joints, bearings), engineering stress analysis, and/or bridge safety inspections, etc. The following are the minimum qualifications for this position:

1. Licensed professional engineer or structural engineer in the State of Michigan.

2. A minimum of five years of documented experience in a specific field related to long span concrete segmental bridge design, their construction, maintenance inspections and/or the evaluation of these bridges for rehabilitation.

3. Must have thorough understanding of the long term durability and maintenance aspects of this type of structure, be capable of identifying areas of structural or maintenance concerns, and making specific recommendations to address these concerns.

C. FIELD STAFF ASSISTING THE ENGINEERING EVALUATION TEAM LEADERS:

The technical aspects of this project will require support staff which are capable

of evaluating the issues inherent in this type of structural system. The following are the minimum qualifications for this position:

1. A technical staff person with a minimum of three years experience in inspection, design, or construction of bridges.

   or:

2. Recent graduate engineer working at the Staff Engineer or entry level position.

The CONSULTANT must staff the project with the number of personnel necessary to complete the project in the allotted time.

D. TECHNICAL WRITING EDITOR

The deliverable for this project will be a Report. The CONSULTANT will provide a technical editor who will review all documents written by the CONSULTANT to ensure that they are crafted to the highest standards. The following are the minimum qualifications for this position:

1. Possession of a degree in journalism or other curriculum focused on written communication skills from an accredited university.

2. Minimum two years experience in editorial review of technical documents, reports, or publications.

E. STRUCTURAL ANALYSIS TEAM

The CONSULTANT will have an in-house staff of structural engineers capable of performing a structural analysis of the structure if necessary. The staff must be backed up by computers and proven structural analysis software for this type of structure, including time dependent factors, second order and thermal stresses. The CONSULTANT's technical proposal must demonstrate this ability.

This analysis is not a part of this contract and if a situation arises will be considered under a revision.

The CONSULTANT can propose additional personnel if there will be substantial benefit to the project. The added benefit must be clearly defined in the proposal.

Any change of Key personnel must be approved by the MDOT Project Manager in accordance with the contract.

VI.VII. **GENERAL DESCRIPTION OF THE WORK:**

The project is broken into several phases noted below. Each technical proposal must follow this format but the CONSULTANT has the freedom to recommend the methodology to perform the work in each phase.

The CONSULTANT will become completely familiar with the structure and the previous inspections. They will perform a detailed in-service engineering inspection of the above structures, analyze this information and compare it with the previous inspections and, provide a Report. The information from the inspection, including pictures, will be collected in the field on tablet PC's using Advitam software. It will be overlaid on the previous inspection and presented in the report.

This Report will identify the current condition of the structure and provide recommendations for repairs or maintenance that will improve the long term durability and longevity of the structure. As part of the analysis phase, the Maintenance Manual will be reviewed. The CONSULTANT will also make recommendations for the maintenance of this bridge that have been successfully implemented by other DOT agencies.

The following provisions are the minimum necessary for every Technical Proposal. The CONSULTANT may elect to suggest additional activities in their Technical Proposal that will improve the inspection or save costs.

A. PRE-INSPECTION / MOBILIZATION PHASE

The CONSULTANT will collect pertinent information on the bridge from sources within MDOT and completely familiarize all staff with the information necessary to do their respective assignments. MDOT will provide access to the records located in the Bay City TSC. It will be the Consultants responsibility to determine what information is necessary for this project and make the copies. A check out and return procedure will be established.

The CONSULTANT will explain the process to convey information learned from the records to the inspectors in the Work Plan (described in §III-A, above). This will be reviewed in the pre-inspection meeting. The Work Plan will also describe the work activities to set up the Advitam software and the inspection form templates in this section.

The CONSULTANT will prepare a file called the "Site Safety and Procedures Manual" for all staff who will be working at the site. This file will detail the information and safety issues they will need to know to safely do their jobs. This will be discussed and reviewed at the Pre-inspection Meeting. The final Work Plan showing all staff assignments and the schedule will also be reviewed at this meeting.

B. INSPECTION PHASE

As stated above, this is a detailed in-service engineering inspection to assess the condition of the bridge and to identify areas of deterioration. The CONSULTANT will be expected to identify conditions that may shorten the service life of the structure or develop into major maintenance activities in the future. To accomplish this, the CONSULTANT will go to the bridge with a team of engineers

and technicians and inspect the structures in the designated areas from a distance of no further than three feet. All work at the site, will be considered part of the Inspection Phase.

Large areas of the structure have not shown any significant deterioration to date. Therefore, the inspection will be confined to those areas that have been of concern in the past and/or are areas of high stress. These are listed below. If a CONSULTANT proposes to go beyond these areas, they must state the reason for this and be prepared to discuss the additional costs.

The limits of this inspection will be confined to the following areas:

1. Deck surface survey as follows:
    a. Left and right shoulders, the outside collector distributor lane, and the inside lane will be visually inspected and tested for delaminations using traditional methods.
    b. The middle two lanes will be observed from the lane closure for the above work but will not be closed. Deterioration observed will be documented and quantities estimated instead of measured.
2. Complete survey of the inside of barrel, including, but not limited to, the King Post Truss and associated structural components and the “H” Ramp.
3. External survey of the super-structure including the barrel and the cantilevered wings, which form the underside of the deck, in certain areas.
    a. At each of the expansion joints, survey the segment adjacent to the joint on each side and two segments on each side of the joint segments (total six segments at each joint.)
    b. At each pier, survey the two segments over the bearings and two segments on each side of the bearings (total six segments at each pier.)
4. All of the visible surfaces of the abutments.
5. Pier columns and struts from ten feet below the bottom of the strut where it attaches to the pier column up to the bearings and all surfaces of the pier.
    The pier columns (except as noted in #6 below) from the ground surface up to ten feet below the strut will be inspected from the ground by an inspector using binoculars. If there are findings of concern to the inspector, it will be brought to the attention of the MDOT PM for consideration of closer examination.
6. Both columns of pier 11N and 17 N and S, over the entire length and all surfaces.
7. All bearings, drainage piping, joint devices and other appurtenances like signs and barrier walls.
8. Fifty percent of the transverse post tensioning anchorages on each fascia.

A survey, as stated here, is defined as a close-up visual inspection (within 3 ft) by an experienced inspector and the sounding of all associated concrete surfaces and documenting all findings.

Items of deterioration including cracks or recracking, rust stains, spalls,

delaminations, leaking or leaching, evidence of externally-caused damage, unusual movements, will be documented (in written form and diagramed) on forms that have been developed in Advitam and have the previous inspection information on them. Any unusual noises will be reported and their cause determined. Photographs or video tapes will be required of all areas of special concern.

The following tasks will be performed as a minimum in addition to the visual inspection noted above:

1. Mark the last 12 in. and note the date at the ends of all new cracks. Mark the growth of cracks previously marked with a permanent marker or paint stick using a different color then used in previous inspections. The deck and previously injected cracks on the outside of the structure will be marked in an inconspicuous manner as observed from the ground. This will be jointly developed by the project staff and approved by the MDOT Project Manager.
2. Inspect the bearings for alignment, evidence of unusual movement, load shifts, loss of neoprene, and broken, cracked or deteriorated components. Clearance alignment measurements will NOT be required, as they have recently been examined. Copies of this data will be made available on request.
3. Inspect and measure the opening of the modular expansion joints. The baseline locations will be provided.
4. Inspect all epoxy joints between the segments within the survey area and note any evidence of leakage, movement of the shear keys, crushing, or voids.
5. Inspect the post-tensioning blisters on the inside of the segments and previous repairs for cracks and delaminations.
6. Inspect all exposed surfaces of the diaphragms on inside of the segments, at the piers and note any evidence of distress.
7. Inspect the drainage system and report anything that will prevent its proper operation or which may cause leakage to the interior.

This inspection is focused on items affecting the long term durability or structural capacity of the structure. Superficial flaws that do not affect these parameters or for which no repairs would be recommended are not to be included to clutter the Report.

If the inspection finds any items that the CONSULTANT anticipates will develop into a situation that will require maintenance in the next three to five years, he / she will identify them in a separate section of the Report along with the reason for the concern and monitoring recommendations.

C. ANALYSIS AND EVALUATION PHASE

During this phase of the project, the CONSULTANT will assemble and evaluate the information collected in the field along with the information collected at the beginning of the project. This phase will run concurrently yet lag the inspection

work at the site. The CONSULTANT will have a team of engineers and technicians that will thoroughly understand the structural system of this bridge and that will be capable of providing sound engineering judgment and opinion based on the information collected for the project. The evaluation team leader will meet the qualifications of the Project Manager noted in §VI-A above.

Documentation collected in the field will be transferred to the CONSULTANTS office from the field at least once per week and every day if the information can be e-mailed. The inspection analysis team will review the inspection information in all forms (written reports, photographs, crack maps, etc.) evaluate the data, and respond back to the inspectors. Such things as evidence of trends, areas of structural deterioration, or areas that may need additional or improved information such as a better picture or a graphic are the examples of the interaction expected. Documentation of this communication will be kept and provided to the MDOT PM during the progress meeting.

In addition, the following items must be done during this phase:

1. The inspection analysis team will review the current Zilwaukee Bridge Maintenance Manual and make recommendations for additions and/or improvements based on the inspection data. Any changes in the procedures or schedules described in this manual must be detailed under a separate heading in the final Report.

2. The analysis team will collate and prepare the inspection information for the Report, which will be organized in a binder separate from the body of the Report.

3. After completion of the inspection, the Project Manager will review all of the information collected, including all of the inspection data, any testing data, the previous inspection data and evaluate it and coalesce into the Report.

4. The Project Manager (and Report author) must complete an outline of the Report. This outline must be submitted and approved by the MDOT PM before the next phase can begin.

All work off the site and not in the field, will be considered part of the Analysis Phase. At the completion of the Analysis Phase, the Report Preparation Phase will begin and will not overlap with the previous phases.

D. <u>REPORT PREPARATION PHASE</u>

The deliverable for this contract will be the Report. Preparation of the Report will be developed in this phase and will be billed and tracked against the budget in the consultants Priced Proposal for this phase.

The Report will be divided into chapters as follows:

1. Executive Summary
2. Introduction
3. Inspection Operations
4. Inspection Results and Analysis
5. Inspection Recommendations
6. Summary

The Report in its final form must present a basic description of the inspection procedure, document in detail all findings in written and diagrammatical form and contain a section that has a segment by segment comparison of this inspection with the previous inspection. A copy of the previous inspection will be provided.

Two copies of an un-bound draft of the Report will be provided to MDOT. One of these will be marked by MDOT with any comments and returned to the CONSULTANT. All drafts must be reviewed by the technical writing editor prior to submission to MDOT. The technical writing editor will provide a cover letter with the draft indicating the document has been reviewed and updated. The editor will insure that the document follows the pre-approved outline and is written in a clear and concise manner for the anticipated audience.

MDOT will reserve the right to request additional drafts for review if, in the opinion of the Project Manager, the changes required are extensive. Failure to make the changes to the Report will be deemed failure to meet the terms of this contract.

The CONSULTANT will provide a snapshot of the report at each progress meeting during this phase with changes from the previous snapshot highlighted (in color or bold). This will be used to track the development of the report and to resolve issues that are in question.

The Report must be printed on both sides of the paper. Color images depicting the items under discussion in the Report must be shown on the same page as the associated text.

As stated above, typical forms have been developed and will be used in the field for documenting the inspection findings. These forms must be included with the Report in a separate binder. A standardized format for photographic and video presentation must be submitted to the MDOT Project Manager or his designate for approval.

Specific maintenance recommendations that have been found by other DOT agencies to enhance the long-term durability of the bridge that the CONSULTANT is aware of, will be detailed under a separate heading in the Report. These recommendations will be listed in order of priority and cost.

The Summary chapter will make an overall assessment of the bridge and evaluate the significance of the individual conditions noted. A detailed structural analysis will not be required unless conditions found during the inspection warrant it (supplemental contract will be required). Repair details and

specifications are not within the scope of this Report. However, repair recommendations must be prioritized and contain enough information so that the nature of the fix can be understood when compared with the significance of the defect.

Problem areas that require specialized testing or investigation must be noted in the Report. However, any testing necessary for proper evaluation of a problem area on the bridge, must be requested as soon as the need is discovered so that MDOT will have time to react within the time frame established for this inspection.

The final Report must be submitted in the latest version of MS Word and on CD, along with five bound copies and one unbound copy for reproduction.

E. EQUIPMENT

The CONSULTANT will be responsible for providing all the necessary inspection equipment. Listed below are some of the items that CONSULTANT will want to consider for inclusion in their proposal.

1. Under Bridge Inspection and Aerial Lift trucks

   Various surfaces of the bridge will require special aerial equipment to inspect at the specified distance. The CONSULTANT, as part of this contract, will provide the number and type necessary to complete the inspection in the specified time. All under bridge inspection trucks and aerial equipment must meet MI OSHA safety standards.

   Each piece of equipment must be listed.

2. The CONSULTANT will be provided one set of rolling scaffold for inspection and concrete sounding on the inside of the barrel. Additional scaffolding will have to be provided by the CONSULTANT.

   The CONSULTANT will also be provided with the use of one of the electrical carts in each of the barrels. The CONSULTANT will be responsible for the safe use of this equipment.

   All MI OSHA requirements for personal safety equipment and for high reach equipment will be required.

3. Additional high intensity lighting.

   The inside of the barrel has incandescent lighting for general use. However, the CONSULTANT will provide additional high intensity lighting for identification of fine cracks. Power outlets are spaced at regular intervals (100 ft +/-).

4. All hand tools and inspection equipment will be provided by the CONSULTANT.

5. Cell Phones, pagers, radios, computers.

The CONSULTANT Project Manager is required to have the use of a cell phone while at the site during the inspection phase. Any other communication and computer equipment must be utilized as necessary to efficiently complete the project. Cell phones can not be charged directly to the project.

6. Digital Camera

The CONSULTANT will utilize a high quality digital camera for all photography. All photos taken will be labeled with a description of what is in the photo and where and when it was taken. All of the photos, whether included in the Report or not, must be compiled onto a CD and given to MDOT with the Report.

F. MAINTENANCE OF TRAFFIC

MDOT will provide traffic control for this project utilizing the bridge maintenance crew. A Maintenance of Traffic Plan must be developed by the CONSULTANT showing what areas will be requested for closure and when. This will be provided to MDOT at the project kickoff meeting. MDOT will review the plan and accept it or reject it with comment. Any revisions or alternations of this plan must be submitted to MDOT for approval. Any delays to the CONSULTANT caused by unapproved changes to the Maintenance of Traffic Plan will not be paid for.

No lane closures or deck work will be allowed on the following days:

The following restrictions will apply for the duration of the inspection:

1. No lane closures on Friday or Saturday on the northbound structure.
2. No lane closures on Sunday or Monday on the southbound structure.
3. Holiday Restrictions:
   a. Labor Day, September 5, 2005: No field work on the structure will be allowed until after the holiday.
   b. Veterans Day, Friday November 11, 2005:
      No lane closures on the northbound structure: Thursday November 10, 2005 thru Wednesday, November 14, 2005.
      No lane closures on the southbound structure: Sunday, November 13, 2005 thru Monday, November 14, 2005.

Prior approval will be required for weekend lane closures. Weather conditions may cause delays in constructing lane closures and MDOT

reserves the right to remove the traffic control if it is deemed necessary.

I. GENERAL:

A. A pre-inspection conference will be held at a place and time mutually agreeable to MDOT and the CONSULTANT. At this time, the Project Manager will describe in detail the schedule and inspection sequence. At or before this time he/she will provide the work plan submittal called for in Section II-C of this Scope of Services.

B. A desk in the MDOT Bridge Crew Building at the bridge site will be provided for the use of the Project Manager.

C. The CONSULTANT will provide an e-mail address to MDOT PM for communication during the project.

D. On site storage for equipment and supplies is limited and is strictly at the CONSULTANT's risk.

II. DECLARATION OF INTENT AND CONTRACT TERMS

A. DECLARATION OF INTENT

The CONSULTANT must state in the technical proposal that the firm will complete the project as described in this Scope of Services. This Scope of Services will have precedence over the technical proposal in any matters of conflict. Any addition or alteration to the Scope of Service the CONSULTANT wishes to suggest in order to improve the inspection or final deliverable must be made clearly evident and accepted by MDOT in writing.

CONSULTANTS are encouraged to express ideas which will distinguish their proposal and add value to the overall project.

B. CONTRACT TERMS

This will be a COST PLUS FIXED FEE NOT to EXCEED contract for the above work.

The CONSULTANT will be paid on a monthly basis. Labor and expenses will be paid as incurred and approved by the MDOT PM during that period. The Fixed Fee will be paid in accordance with the terms of the contract. All pay requests will be mailed to "Operations Contract Support" Attention Portia VanPelt, address on the cover of this document. They will then be submitted to the MDOT PM for approval. Invoicing procedures can be found in filelibraries OCSCONS.

The invoices will be compared to the weekly personnel roster submitted as noted in §III-C . All invoices must include a completed Invoice Summary form that will be supplied by MDOT. They must also have a tabulation of the time spent for each position classification for the primary and all sub-CONSULTANTS. Also included in the invoice must be copies of time sheets for all personnel invoiced and copies of expense receipts.

C. PRICE PROPOSAL REQUIREMENTS

After the interviews, the CONSULTANT tentatively selected for the project will be requested to provide a PRICE PROPOSAL. Guidelines for developing Priced Proposals can be found at http://mdotwas1.mdot.state.mi.us/public/bbs/index.cfm?action=openlib. Select "OCSCONS" and the file "ppguides.doc".

This proposal must have the following individual items listed with the units indicated:

1. All labor costs will be presented in matrix form showing the task and the assigned position. This will show the number of hours for each task and will be summarized for each phase. A tabulation will show the names associated for each position classification, wage rate, anticipated time for each position classification, and the multiplier for all overhead. The individual person will be listed if the pay rates for each person within a classification vary.
2. The CONSULTANTS fixed fee (11% Maximum) for the project.
3. All anticipated types of expenses itemized (i.e. travel, reproduction, etc.).
4. All equipment costs (high reach inspection vehicles). Each piece of equipment must be listed separately.
5. Recommended nondestructive testing by type.

END OF DOCUMENT

MDOT
Michigan Department of Transportation